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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,152	12/20/2001	Eugene A. Rodi	RA-5425	3382

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UNISYS CORPORATION
UNISYS WAY
MAILSTOP E8-114
BLUE BELL, PA 19424-0001

EXAMINER

PHAM, CHRYSTINE

ART UNIT PAPER NUMBER

2122

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/028,152

Applicant(s)

RODI ET AL.

Examiner

Chrystine Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The use of the trademarks "VISUAL BASIC", "EXCEL", "VISIO" has been noted in this application. Trademarks should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner, which might adversely affect their validity as trademarks.

Claim Objections

2. Claim 2 is objected to because of the following informalities: grammatical fragment (see "and pro" line 2). Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 1, it recites the limitation "said date" in line 3. There is insufficient antecedent basis for this limitation in the claim. For compact prosecution of the claims, the office has interpreted the limitation as a misspelling error of what should have been "said data" instead.

Thus, limitation "said date" is interpreted, hereinafter, as "said data" which has sufficient antecedent basis (i.e., "data" recited in line 1).

As per claim 6, the term "substantially" in claim 6 line 4 is a relative term, which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The office's rationale for viewing the term "substantially" as a relative term is that depending on different systems and standards of measurement, "substantially modified" can be defined as being 50%, 75%, or 99% modified. Furthermore, what is considered as "substantially modified" (e.g., 99% modified) in one system or standard of measurement might not be in compliance with other systems of standards of measurement wherein "substantially modified" is defined as 99.9% modified. For compact prosecution of the claims, the office has interpreted the term "substantially" in the context of claim 6 as to mean a display that can vary in accord to each command.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 4, 6, 10, 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Lewis et al. (US 5790435), hereinafter *Lewis et al.*.

As per claim 4, *Lewis et al.* teach method and an apparatus (e.g., see Abstract, see FIG.1, 2 & associated text) comprising electronic signals within a computer memory or

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transportable disk (e.g., see 14 FIG.1 & associated text) for operating a control program or software (e.g., see *computer program* col.2:57-59) for drawing a timing chart from spreadsheet program (having a graphical user interface) data file (e.g., *Parameter Spreadsheet* 38 FIG.4 & associated text) employing a drawing program (e.g., see FIG.4 & associated text, col.4:11-12, see *Diagram Window* 36 FIG.3 & associated text) comprising, upon initiation of said program

- o said control program containing a procedure or subroutine (e.g., see *function* col.3:64-67, col.4:20-25) for capturing data from said spreadsheet data file (e.g., see *Row 74, Row Number* 76 FIG.4 & associated text), said control program containing a subroutine for sending (interpreted) commands interpretable by said drawing program (e.g., see *menus* 60 FIG.3 & associated text) based on said captured data to said drawing program together with any associated datums within said data (e.g., see *Margin* 88, *Comment* 90 FIG.4 & associated text), wherein said captured data contains commands (e.g., see *Min* 84, *Max* 86, *Formula* 82, *D* 78, FIG.4 & associated text, see *D* and *C* and *S* col.6:26-31, see *Delays* col.12:35-40) for each line (e.g., see *clock signal* col.1:24-25, see 42, 44 FIG.3 & associated text) of a timing chart (e.g., see *timing diagrams* col.1:19),
- o said control program including a set of subroutines for interpreting said commands for identifying drawing actions (e.g., see *Min* 84, *Max* 86, *Formula* 82, *D* 78, FIG.4 & associated text, see *D* and *C* and *S* col.6:26-31, see *Delays* col.12:35-40) to be accomplished by said drawing program and wherein said control program commands said drawing program in conformity with said commands (e.g., see *Diagram Window* 36 FIG.3 & associated text, see *PC monitor* 12 FIG.1 & associated text).

As per claim 6, *Lewis et al.* teach the method as applied to claim 4 further comprising in said step of said control program commanding said drawing program in conformity with said commands, said drawing program produces a display modified by substantially each command (e.g., see *Clock1* 44, *Sig1* 42, *Sig2* 42, *Data* 42 FIG.3 & associated text).

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7. Claim 10 recites limitations, which have been addressed in claim 4, therefore, is rejected for the same reasons as cited in claim 4.

As per claims 16-17, they recite limitations, which have been addressed in claim 4, therefore, are rejected for the same reasons as cited in claim 4.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1, 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. (US 5790435), hereinafter, *Lewis et al.* in view of Microsoft Corporation, *Customizing Visio 2000 Software White Paper*
<http://www.microsoft.com/technet/prodtechnol/visio/visio2000/maintain/custom.mspix> (hereinafter *Visio2000*).

As per claim 1, *Lewis et al.* teach method and an apparatus (e.g., see Abstract, see FIG.1, 2 & associated text) comprising electronic signals within a computer memory or transportable disk (e.g., see 14 FIG.1 & associated text) for operating a control program or software (e.g., see *computer program* col.2:57-59) comprising:

- o capturing data from spreadsheet program (having a graphical user interface) data file (e.g., *Parameter Spreadsheet* 38 FIG.4 & associated text), wherein said data is organized by lines or rows (e.g., see *Row 74, Row Number 76* FIG.4 & associated text), and wherein a set of lines contains all information needed for producing a single signal

line or a header/format line (e.g., see *clock signal* col.1:24-25, see 42 FIG.3 & associated text), and wherein there is a multiplicity of sets of lines in a said spreadsheet program data file (e.g., see 74 FIG.4 & associated text, see scrollbar FIG.4 & associated text), said capturing including,

- for each for set of lines of said data file information unique to a particular signal line intended to be displayed (e.g., see FIG.3 & associated text), capturing, from said spreadsheet program data file by communication of a procedure or subroutine (e.g., see *function* col.3:64-67, col.4:20-25) within said program with said spreadsheet program which is actively running (e.g., see *Parameter Spreadsheet 38* FIG.4 & associated text, col.13:60), said data file information,
- interpreting in said procedure said data file information from said set of lines in accord with a command (interpreted by the spreadsheet) for identifying drawing actions (e.g., see *Min 84, Max 86, Formula 82, D 78*, FIG.4 & associated text, see *D* and *C* and *S* col.6:26-31, see *Delays* col.12:35-40) from within said set of lines.
- preparing said data file information in accord with said command in said procedure to instruct a drawing program (e.g., see *Diagram Window 36* FIG.3 & associated text) to draw a signal line or a header/format line (e.g., 42, 44 FIG.3 & associated text, col.5:46-49, col.5:52-55) in accord with said command from within said set of lines (e.g., see FIG.4 & associated text, see FIG.10 & associated text),
- operating the drawing program to provide a display file containing each said particular signal line and header/format line in accord with said captured data interpreted through said command from within said set of lines pertaining to each said signal line or header/format line by procedure sending to said drawing program (e.g., see FIG.4 & associated text, col.4:11-12) a command (see *menus 60* FIG.3 & associated text) and data parameters (e.g., see *Row 74* FIG.4 & associated text) corresponding with each said set of lines together with said command for each said set of lines so that said drawing program can produce a file containing sufficient information (e.g., see FIG.14 &

associated text, see *files* col.22:50-52) for the drawing program to print (e.g., col.21:43-44), display, or draw a timing chart (e.g., see *timing diagrams* col.1:19) having each signal line and header/format line (e.g., see 42, 44 FIG.3 & associated text) incorporated therein (e.g., see *Diagram Window* 36 FIG.3 & associated text, see *PC monitor* 12 FIG.1 & associated text).

Lewis et al. do not expressly disclose the spreadsheet program data file being Excel spreadsheet program data file, the control program and procedure being a Visual Basic program and procedure, and the drawing program being a Visio program producing a .vsd file. However, *Visio2000* discloses a Visual Basic procedure within a Visual Basic program (e.g., see *built-in macros* pg.14 par.2 under section **VBA, Automation, and the Visio 2000 Object Model**) communicating with an Excel spreadsheet program for capturing data file information (e.g., pg.14 par.3 lines 16-18 under section **VBA, Automation, and the Visio 2000 Object Model**) and instructing a an instance of a Visio program (e.g., pg.2 par.1 lines 4-5 under section **Introduction**, see *Automation* pg.3 par.4 lines 1-8 under section **Go deeper with Automation**, pg.14 par.3 lines 4 and 8-9 under section **VBA, Automation, and the Visio 2000 Object Model**) to produce a .vsd file containing sufficient information (e.g., see *ShapeSheet.vsd* pg.9 Figure 7 under section **Making Symbols Smarthe ShapeSheet Environment**, pg.10 lines 8-11) for drawing charts and diagrams (e.g., see pg.1 par.1 lines 1-2 under section **Introduction**) using lines (e.g., pg.11 par.1 line 2 under section **Parametric Geometry**). *Lewis et al.* and *Visio2000* are analogous art because they are both directed to drawing charts and diagrams. It would have been obvious to one of ordinary skill in the pertinent art at the time the invention was made modify the teaching of *Lewis et al.* with that of *Visio2000* to substitute the spread sheet program/file, control program/procedure and drawing program with Excel spreadsheet program/file, Visual Basic program/procedure, and Visio drawing program, respectively. And the motivation for doing so would have been attributed to the Visio software ability to be customized (e.g., add new functionality, import or modify graphics/symbols, create new symbols), offering ease of use and flexibility in modeling/diagramming information/data for further analysis. In

addition, Visual Basic is simple programming language designed to be used as a creating tool for customized procedures/subroutines to perform repetitive tasks, and enable manipulation of Visio drawing/functionality and link or integrate the Visio software with other applications via Automation.

As per claim 11, it recites limitations, which have been addressed in claims 1 and 10, therefore, is rejected for the same reasons as cited in claims 1 and 10.

As per claim 12, *Lewis et al.* (as modified by *Visio2000*) teach an apparatus as applied to claim 11 wherein said Visual Basic program subroutine for capturing said data and commands from said spreadsheet data file comprises a routine for requesting a row of data (e.g., col.13:60-62) from a spreadsheet program (see claim 1).

As per claims 13-15, they recite limitations, which have been addressed in claims 12 and 1, therefore, are rejected for the same reasons as cited in claims 12 and 1.

10. Claims 2-3, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Lewis et al.* in view of *Visio2000* further in view of Yamazaki (US 5983181), hereinafter, *Yamazaki*.

As per claim 2, *Lewis et al.* as modified by *Visio2000*, hereinafter **L2** teach the method as applied to claim 1. **L2** do not expressly disclose said sets of lines of said data file are read in order from one end of the data file to the opposite end of said data file. However, *Yamazaki* discloses a method of reading each row of data from file in order from top end (e.g., see (1,A)-(1,D) FIG.36A & associated text, col.30:10-20) of the file to the opposite or bottom end (e.g., see (4,A)-(4,D) FIG.36A & associated text, col.30:10-20) of said data file (e.g., see FIG.36A & associated text). **L2** and *Yamazaki* are analogous art because they are both directed to processing information stored in spreadsheet data files. It would have been obvious to one of

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ordinary skill in the pertinent art at the time the invention was made to modify the teaching of **L2** with that of *Yamazaki* to include the reading of data within the file from top end to opposite or bottom end of the file. And the motivation for doing so would have been to enable the identification and grouping of items or cells having the same types or units to specify to a voice-synthesis module the order of which the items should be read out.

As per claim 3, it recites limitations, which have been addressed in claim 2, therefore, is rejected for the same reasons as cited in claim 2.

As per claim 5, it recites limitations, which have been addressed in claims 4, and 2, therefore, is rejected for the same reasons as cited in claims 4 and 2.

11. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Lewis et al.* in view of *Visio2000*, in view of *Yamazaki*, and further in view of *Gorbet et al.* (US 5781190), hereinafter, *Gorbet et al.*.

As per claim 7, *Lewis et al.* as modified by *Visio2000* as modified by *Yamazaki*, hereinafter **L3** teach the method as applied to claim 5. **L3** do not expressly disclose wherein a user supplies the spreadsheet data file name to said control program. However, *Gorbet et al.* teach a method wherein a user supplies a spreadsheet data file name (e.g., see 320-324 FIG.3B & associated text, see 502 FIG.5 & associated text, see C:\spreadsheets\financial.xls!A1:F1 col.1:32-40, see *LinkSource* col.10:38-40) via a graphical user interface (e.g., see FIG.4E & associated text). **L3** and *Gorbet et al.* are analogous art because they are both directed to processing information stored in spreadsheets. It would have been obvious to one of ordinary skill in the pertinent art at the time the invention was made incorporate the teaching of *Gorbet et al.* into that of **L3** to include the user supplying the spreadsheet data file name. And the

motivation for doing so would have been to enable to user to update the *LinkSource* (i.e., selecting new source spreadsheet file) containing data to be processed, presented or displayed.

As per claims 8-9, they recite limitations, which have been addressed in claims 7 and 4, therefore, are rejected for the same reasons as cited in claims 7 and 4.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:
- System for displaying desired portions of spreadsheet on a display screen by adjoining the desired portions without the need for increasing the memory capacity, Sugimura et al. (US 6115759)
 - System for generating worksheet files for electronic spreadsheets, Dubnoff (US 5033009)
 - System for instance customization, Caron et al. (US 6108661)
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chrystine Pham whose telephone number is 703.605.1219. The examiner can normally be reached on Mon-Fri, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q Dam can be reached on 703.305.4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chrystine Pham

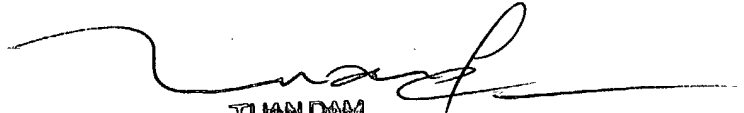
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Examiner
GAU 2122

*** After October 25, 2004, examiner can be reached at new telephone number (571) 272-3702, and the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3694.

A handwritten signature in black ink, appearing to read 'Tuan Q. Dam', with a long horizontal flourish extending to the right.

TUAN DAM
SUPERVISORY PATENT EXAMINER